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July 13, 2004

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> Street, S.W. Washington, DC 20554

Re: CC Docket No. 01-338

Dear Ms. Dortch:

Attached is a summary of reasons for granting unbundling relief for fiber-to-thecurb. Please file in the above-mentioned docket. Thank you.

Sincerely.

Jonathan Banks

JB:kjw Attachment

cc: Christopher Libertelli

## SUMMARY OF REASONS FOR GRANTING UNBUNDLING RELIEF FOR FIBER-TO-THE-CURB

The Commission should conclude that both the public interest and section 251(d)(2) support granting reconsideration of the *Triennial Review Order*<sup>1</sup> to the extent that order treats Fiber To The Curb ("FTTC") loops less favorably than Fiber To The Home ("FTTH") Loops for purposes of unbundling relief. The record developed in this proceeding establishes that FTTC loops, defined as loops containing fiber to a serving terminal that is located within 500 feet of the customer premises, offer the same truly broadband capabilities as FTTH loops and support the same services. The *Triennial Review Order* did not analyze the functional equivalence of these technologies;<sup>2</sup> after having done so on reconsideration, the Commission should now conclude that these two kinds of loops should be treated in the same manner for regulatory purposes, so that competitors make decisions as to which of these next-generation architectures to deploy based on engineering and economic considerations, not differential regulatory treatment.

Contrary to some parties' arguments,<sup>3</sup> the Commission should find that the record establishes that FTTC loops currently support the same truly broadband functionalities as FTTH loops. Multiple parties, including a large number of equipment makers with significant first-hand knowledge, have provided record evidence demonstrating that FTTC and FTTH loops currently support the same broadband functions, including video-on-demand services and digital television, voice, and high-speed Internet access.<sup>4</sup> Both FTTC and FTTH convert optical signals carried over fiber to electronic signals carried over copper wires at a point close to the devices that will receive the signals. FTTH architectures typically perform the conversion slightly closer to the devices, and therefore generally have slightly less copper wire in the overall loop facility. For practical purposes, however, this is a distinction without a difference. As Advanced Fibre Communications, a provider of both FTTC and FTTH, explains, both those kinds of loops "deliver the same services to a customer." Marconi has similarly explained that, because copper lines exhibit very little impedence at lengths up to 500 feet, FTTC up to that distance "enabl[es] significant capacity/bandwidth" and supports video, data, and voice. For that reason, Marconi states, 500 feet has been adopted as the maximum copper length in FTTC loops, as specified in

<sup>&</sup>lt;sup>1</sup> Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, 18 FCC Rcd 16978 (2003) ("Triennial Review Order"), vacated in part and remanded, United States Telecom Ass'n v. FCC, 359 F.3d 554 (D.C. Cir. 2004).

<sup>2</sup> The Triennial Review Order suggested in a footnote that FTTC was distinct from FTTH technologies. See

<sup>&</sup>lt;sup>2</sup> The *Triennial Review Order* suggested in a footnote that FTTC was distinct from FTTH technologies. *See* Triennial Review Order ¶ 275 n.811. The Commission's order did not include any analysis of that point, and the Commission should now conclude that the document cited there, Telcordia's *Notes on Fiber-in-the-Loop*, SR-Notes-Series-10, Issue 1 (July 2001), supports the conclusion on reconsideration that these next-generation architectures support equivalent services. For instance, the Telcordia paper states that FTTC "offer[s] cost-effective alternatives for all-optical [that is, FTTH] deployment." *Id.* at 5-1. It further states that FTTC is "sufficient to support a full range of voice, video, and data services that subscribers expect in today's market." *Id.* 

<sup>&</sup>lt;sup>3</sup> See, e.g., Opposition of AT&T Corp, to BellSouth Petition for Reconsideration at 20 (FCC filed Nov. 6, 2003) ("AT&T Opp."); Opposition of MCI to BellSouth, SureWest, and USIIA Petitions for Reconsideration at 3-4 (FCC filed Nov. 6, 2003).

<sup>&</sup>lt;sup>4</sup> See Catena Comments on Petitions for Reconsideration at 9 (FCC filed Nov. 6, 2003) ("Catena Comments"); Advanced Fibre Communications Jan. 30 ex parte (FCC filed Jan. 30, 2004) "(Advanced Fibre Jan. 30 ex parte"); Marconi Reply Comments on Petitions for Reconsideration at 4-8 (FCC filed Nov. 17, 2003) ("Marconi Reply"); High-Tech Broadband Coalition Comments at 8 (FCC filed Nov. 6, 2003).

<sup>&</sup>lt;sup>5</sup> Advanced Fibre Jan. 30 ex parte at 8-9.

<sup>&</sup>lt;sup>6</sup> Marconi Reply at 5.

Telcordia's GR-909 standard.<sup>7</sup> Thus, although the theoretical maximum bandwidth supported by FTTH may be greater than that of FTTC,<sup>8</sup> the relevant point is that both support the amount of bandwidth necessary to deliver the same full range of broadband services.

Because FTTC offers equivalent truly broadband functionalities, the Commission should conclude that, in accord with the federal policy established by section 706 of the 1996 Act, it is appropriate to provide the same incentives for carriers to provide FTTC as the Commission has previously provided for FTTH. Specifically, in the *Triennial Review Order*, the Commission concluded that declining to require the unbundling of next-generation networks would stimulate investment in fiber-based technologies and spur broadband deployment by both incumbent LECs and competitive LECs, to the benefit of consumers. For that reason, the Commission decided that section 706 strongly supported its decision not to require unbundling of FTTH (except for a limited requirement to make a voice-channel available in overbuild situations). As the Commission stated, "promoting the deployment of FTTH loops is particularly important in light of our section 706 mandate" because "FTTH loops significantly enhance the broadband capabilities a carrier can deliver to consumers."

That section 706 mandate applies equally here and, by itself, is sufficient to support a Commission determination not to unbundle FTTC loops except to the same limited degree that the Commission has previously required for FTTH loops. The D.C. Circuit, in affirming the *Triennial Review Order*'s decision as to FTTH loops, concluded that section 706 provided a wholly adequate basis for that determination: "Even if the CLECs are impaired with respect to FTTH deployment (a point we do not decide), the § 706 considerations . . . are enough to justify the Commission's decision not to unbundle FTTH. . . . We find that these [section 706] considerations are sufficient to justify the Commission's decision not to require FTTH unbundling." The court explained that requiring unbundling of such next-generation facilities would "likely . . . delay infrastructure investment, with CLECs tempted to wait for ILECs to deploy FTTH and ILECs fearful that CLEC access would undermine the investments' potential return."

This congressional policy in favor of spurring broadband infrastructure investment and deployment should lead the Commission to grant the same relief for FTTC as it previously did for FTTH so that carriers are not dissuaded from deploying FTTC (and thus providing broadband capabilities to more Americans) because of regulatory requirements. In this regard, it is significant that the record indicates that there are instances in which FTTC is a more efficient

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<sup>&</sup>lt;sup>7</sup> See id. The 500-foot standard is thus not an arbitrary demarcation, but reflects both industry standards and the laws of physics. There is also no reason to conclude – as one commenter suggests – that there will be difficulty in determining which loops qualify as FTTC loops for purposes of unbundling relief. See, e.g., ALTS Jan. 23 ex parte at 2 (FCC filed Jan. 23, 2004). BellSouth has provided a declaration explaining that both FTTC and FTTH loops bear an information code in BellSouth's systems identifying them as fiber loops; other loops with copper bear a different designator. See BellSouth Fogle Decl ¶ 6 (attached to BellSouth Reply (FCC filed Nov. 17, 2003)).

<sup>8</sup> See Fiber-to-the-Home Coalition Feb. 13 ex parte at 13 (FCC filed Feb. 13, 2004).

<sup>&</sup>lt;sup>9</sup> See Triennial Review Order ¶ 272. There is already evidence that this analysis was correct. For instance, Catena reports that it and other manufacturers experienced significant revenue growth in the quarter after adoption of the Triennial Review Order. See Catena Comments at 7-8 & n.11.

<sup>&</sup>lt;sup>10</sup> Triennial Review Order ¶ 278.

<sup>&</sup>lt;sup>11</sup> United States Telecom Ass'n v. FCC, 359 F.3d 554, 583-84 (D.C. Cir. 2004).

<sup>&</sup>lt;sup>12</sup> Id. at 584.

choice than FTTH, because, unlike FTTH, it allows the same electronics to be shared by 8 to 12 consumers. <sup>13</sup> Thus, granting regulatory relief as to FTTC should allow carriers, including competitive LECs, to offer broadband service to more consumers using FTTC than FTTH. It would be unfortunate, and contrary to the federal policy codified in section 706, if the costs of regulation dissuaded carriers from deploying the most efficient next-generation facilities and thus delayed the availability of true broadband capabilities to many Americans.

The Commission should reject commenters' arguments that lifting unbundling obligations on FTTC loops is unlikely to spur broadband deployment and the delivery of broadband capabilities to consumers. AT&T argues, for instance, that incumbent LECs are already deploying FTTC widely without unbundling relief, and that incumbents are not providing next-generation services, such as video, over those facilities. 14 BellSouth has explained, however, that 93 percent of the customers in its serving areas do not have access to FTTC right now, and that, contrary to AT&T's assertion, it is in fact using FTTC to support video services. 15 Indeed, BellSouth states that it has activated the capability to provide a 230channel video service to 200,000 FTTC homes in the BellSouth region. <sup>16</sup> In fact, FTTC bears a close resemblance to video delivery transmission facilities of cable companies. Those facilities, like FTTC, generally use fiber optic cable to bring signals close to the house, and then copper (coaxial cable) wires to carry the signal the remaining distance to the home. These facts indicate that there is room for extensive additional FTTC deployment; that the deployment will bring with it broadband capabilities; and that, as the D.C. Circuit found with regard to FTTH, regulatory requirements are likely to impede that deployment, in contravention of the explicit congressional policy codified in section 706.

Beyond this, and in addition to the arguments under section 706, the Commission should find that competitive LECs are not impaired without access to FTTC loops. The Commission should reach this conclusion for the same basic reasons that it concluded that they were not impaired without access to FTTH loops in the *Triennial Review Order*. As with FTTH, in most cases, competitive LECs and incumbent LECs face the same costs in deploying FTTC. Indeed, the record here shows that 85 percent of BellSouth's FTTC is deployed in greenfield situations in which the incumbent has no advantage. Greenfield situations require the placement of all new facilities, and the required investment is no different for competitive LECs and incumbent LECs. Even where some facilities already exist, incumbent LECs must engage in a significant amount of re-engineering and new facilities deployment. For instance, BellSouth has explained that in most overbuild situations it must deploy new copper drops and that it always must deploy new coaxial cable. Moreover, as noted in the *Triennial Review Order*, competitive LECs may have significant countervailing advantages in labor costs. And, because FTTC supports video, data, and voice applications, FTTC, like FTTH, offers competitors "potential rewards" that are

<sup>&</sup>lt;sup>13</sup> See BellSouth Pet. for Clarification and/or Partial Recon. at 5-6 (FCC filed Oct. 2, 2003). FTTC, unlike FTTH, also allows for continued service when an end-user's power is down. See id. at 6.

<sup>&</sup>lt;sup>14</sup> See, e.g., AT&T Opp. at 8-10.

<sup>&</sup>lt;sup>15</sup> BellSouth Jan. 5 ex parte at 1-2 (FCC filed Jan. 5, 2004).

<sup>&</sup>lt;sup>16</sup> See id.

<sup>&</sup>lt;sup>17</sup> BellSouth Fogle Decl. ¶ 5.

<sup>&</sup>lt;sup>18</sup> See id.; Marconi Reply at 11.

<sup>&</sup>lt;sup>19</sup> BellSouth Fogle Decl. ¶ 5.

<sup>&</sup>lt;sup>20</sup> See Triennial Review Order ¶ 275 n.808.

"significant" and that "ameliorate many of the entry barriers" that might otherwise exist.<sup>21</sup> Notably, there is evidence that some competitive LECs, including Grande Communications, Knology, Litestream, and FCI Broadband have deployed FTTC in greenfield situations, indicating that it is possible for competitive LECs to invest in their own facilities.<sup>22</sup>

For all these reasons, the Commission should conclude that its rules should be modified to grant the same unbundling relief for FTTC as for FTTH. The Commission should thus alter Rule 319(a)(3) so that it applies to "fiber loops," which are "local loops consisting either entirely of fiber optic cable, whether dark or lit, or of fiber optic cable to a serving terminal that is located within 500 feet of the customer premises." The Commission should also amend Rule 319(a)(2) so that it makes clear that "Hybrid loops do not include 'fiber loops' as defined in subsection (a)(3)."

<sup>21</sup> *Id.* ¶ 274.

<sup>&</sup>lt;sup>22</sup> See Marconi Reply at 10.